

Tender Notice

The Energy and Resources Institute (TERI)
6C, Darbari Seth Block,
India Habitat Centre, Lodhi Road, New Delhi – 110 003

TERI invites Bids from Prospective Bidder through tendering for the Implementation (supply, installation, commissioning and maintenance) of approximately 100 nos of Solar Street Lights in the rural areas of Purulia, West Bengal, as per the details given in tender document.

SI No.	Item	Tender No.	Quantity Required	Fee of Tender Document	Earnest Money Deposit
1	Solar Street Light in the rural areas of Purulia, West Bengal, India	<u>TERI/ST/LaBL/2016–17/001</u>	100 Nos	1,000	50,000.00

The tender document is available at TERI's website www.teriin.org/announcements from August 4, 2016. Interested bidders may view, download the Bid document, seek clarification and submit their Bid up to the date and time mentioned in the table below:

SI No.	Milestone	Date and Time (dd-mm-yyyy; hh:mm)
1	Release of tender	05/08/2016
2	Last date for submission of written questions by bidders	18/08/2016
3	Response to the queries by TERI	22/08/2016
4	Last date for submission of technical bid and financial bid response	26/08/2016, 11:00 hrs
5	Opening of technical bid responses	26/08/2016, 14:00 hrs
6	Declaration of shortlisted firms on the basis of Stage 1 evaluation	To be informed later
7	Financial bid opening of only of technically qualified	To be informed later

	bidders	
8	Finalization of vendor	Intimation to be given only to finalized vendor(s)
9	Venue of opening of technical and financial bids	The Energy and Resources Institute, 6C, Darbari Seth Block, India Habitat Centre, Lodhi Road, New Delhi – 110 003
10	Project Timeframe	4 months

The bidders need to submit the cost of Bid document fees and EMD as stated in the above table through Demand Draft as bid document's fees and bank guarantee as EMD in favour of TERI, payable at New Delhi. Numbers of the system mentioned as above, may increase or decrease depend upon the field situation. TERI reserves the right to reject any or all tenders without assigning any reason thereof. The decision of TERI will be final and binding.

(Head-Materials)

TERI

Covering Letter

FROM:

(Full name and address of the Bidder)

.....

.....

To:

Head-Materials,

The Energy and Resources Institute (TERI)

Darbari Seth Block, India Habitat Centre

Lodhi Road, New Delhi – 110 003

Subject: Offer in response to tender no: TERI/ST/LaBL/2016–17/001

Sir,

We hereby submit our offer in full compliance with terms and conditions of the above tender. The bid, duly signed on each page, is submitted along with our acceptance of all specifications as well as terms/ conditions.

We confirm that, we have the capability to supply, install, implement, and carryout three years comprehensive warranty maintenance of Solar Street Lights in the given time period (Supporting document in proof of capacity should be attached).

The tender is submitted in two separate envelopes named Part-A for technical bid & Part-B for Financial Bid only.

(Signature of Bidder with seal)

Checklist of Annexures

The following information/documents are to be annexed and flagged by the Bidders along with the BID.

SI No.	Annexure No.	Particulars	Yes/No, Flag No
	Annexure I (a)	Details of Tender document fees (Demand Draft no., date, amount and bank name)	
	Annexure I (b)	Details of Earnest money (Demand Draft no., Date, Amount and bank name)	
	Annexure II	The bidder is a Manufacturing Company/Firm/Corporation registered in India (A copy of the order and certificate indicating its successful execution to be enclosed)	
	Annexure IV	A copy of valid CST/State VAT/TIN registration certificate	
	Annexure V	Overall Average Annual Turnover of the Company/Firm/ Corporation in the latest last three financial years (A summarized sheet of turnover of last three Financial Years certified by registered CA) with and latest balance sheet	
	Annexure X	<p>Cumulative Experience* of the Bidder in supply and installation/commissioning of total number of street lights based projects.</p> <p>>1,000 nos</p> <p>>2,000 nos</p>	
	Annexure XI	The bidder has ISO 9001 certification	
	Annexure XII	The bidder has ISO 14001 certification	
	Annexure XIII	Copies of the purchase order/work order regarding installation of street lights	
	Annexure XIV	<p>Others:</p> <p>(i) An undertaking that the service centers will be opened in allotted district and list will be submitted before supply and installation for verification.—</p>	

		(ii) An undertaking that the company/firm/Corporation has not supplied the street light to any Government Agency below the price quoted in this tender.	
	Annexure XV	Duly filled technical bid	

Please flag the annexure and write flag number in the box.

*Bidder's experience should be in supply, installation/commissioning (contracts executed, completed and handed over) of street light

Note:

- Bids received without supporting documents for the various requirements mentioned in the tender document may be rejected.
- The tender document should be spiral bound and all annexures and their flags should be in proper order.

(Signature of Bidder with seal)

Particulars of Tender

1	Tender no.	<u>TERI/ST/LaBL/2016-17/001</u>
2	Particulars of work	Implementation (supply, installation, commissioning and maintenance) of 100 nos of street Lights in the rural areas of Purulia, West Bengal.
3	Last date and time of submission of tender documents	26/08/2016, 11:00 hrs
4	Period of validity of rates for acceptance	Three months from opening of financial bid
5	Date and time of opening of tender (Technical bid)	26/08/2016, 14:00 hrs
6	Date and time of opening of tender (Financial bid)	To be informed
7	Venue of opening of technical and financial bids	The Energy and Resources Institute, 6C, Darbari Seth Block, India Habitat Centre, Lodhi Road, New Delhi – 110 003

1. Bidders are advised to study the tender document carefully. Submission of Bid against this tender shall be deemed to have been done after careful study and examination of the procedures, terms and conditions of the tender document with full understanding of its implications.
2. The Bids will be opened in the presence of bidder's representatives, who choose to attend at the venue, on the date and time mentioned in the Table above.

(Signature of Bidder with seal)

General Particulars of the Bidder

Sl No.	Name of bidder	
	Postal address	
	Mobile no.	
	Telephone, Telex, Fax no.	
	E-mail	
	Website	
	Name, designation and mobile phone no. of the representative of the Bidder to whom all references shall be made	
	Name and address of the Indian/foreign collaboration, if any	
	If have anything/extra other than price of items (as mentioned in price Schedule) to be mentioned in the price schedule.	
	Have the bidder to pay arrears of income tax? If yes, up to what amount?	
	Have the Bidder ever been debarred By any Govt. Dept./Undertaking/Pvt. Co. for undertaking any work?	
	Monthly supply capacity (attach supporting document)	
	Details of offer (please mention number of pages and number of drawings in the hard copy)	
	Reference of any other information attached by the tenderer (please mention number of pages and drawings)	

(Signature of Bidder with seal)

DECLARATION BY THE BIDDER

(Regarding Tender no. TERI/ST/LaBL/2016-17/001)

I/We _____ (hereinafter referred to as the Bidder) being desirous of tendering for the work under the above mentioned tender and having fully understood the nature of the work and having carefully noted all the terms and conditions, specifications, etc., as mentioned in the tender document,

DO HEREBY DECLARE THAT:

1. The Bidder is fully aware of all the requirements of the tender document and agrees with all provisions of the tender document.
2. The Bidder is capable of executing and completing the work as required in the tender.
3. The Bidder accepts all risks and responsibilities directly or indirectly connected with the performance of the tender.
4. The Bidder has no collusion with other Bidders, any employee of TERI or with any other person or firm in the preparation of the bid.
5. The Bidder has not been influenced by any statement or promises of TERI or any of its employees, but only by the tender document.
6. The Bidder is financially solvent and sound to execute the work.
7. The Bidder is sufficiently experienced and competent to perform the contract to the satisfaction of TERI.
8. The information and the statements submitted with the tender are true.
9. The Bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central government that may affect the work, its performance or personnel employed therein.
10. The Bidder has not been debarred from similar type of work by TERI and or Government undertaking/department/any other private company.
11. This offer shall remain valid for acceptance for three months from the date of opening of financial bid of tender.
12. The Bidder gives the assurance to execute the tendered work as per specifications terms and conditions.
13. The Bidder confirms the capability to supply, install and carryout three years comprehensive warranty maintenance of street light within the time schedule as mentioned in the tender document.

(Signature of Bidder with seal)

PART-2: INSTRUCTION TO BIDDERS

SECTION 1: THE TENDER DOCUMENT

1.1 CONTENT OF TENDER DOCUMENT

1.1.1 The tender procedure and contract terms are prescribed in the tender Documents. In addition to the tender notice, the Bidding documents include:

PART-A

Part-1

1. Tender Notice
2. Covering Letter
3. Checklist of Annexures
4. Particulars of Tender
5. General Particulars of Bidder
6. Declaration by Bidder

Part-2: Instruction to Bidders

- Section -1 Contents of tender document
- Section -2 Eligibility condition
- Section-3 Preparation of tender
- Section-4 Submission of tender
- Section -5 Tender opening and evaluation
- Section-6 Procedure for finalization of Bid

Part-3: General Condition of Contract

Part-4: Scope of Work and Technical Specifications

Part-5: Details of Warranty

Part-6: Technical Bid

Part – B

Financial Bid

The Bidder is expected to examine all instructions, forms, terms and specifications as mentioned in the tender document. Failure to furnish all information required by the tender documents or submission of a bid not substantially responsive to the Bid document in every respect will be at the Bidder's risk and is likely to result in out-right rejection of the tender

1.2 LOCAL CONDITIONS

It shall be imperative on each bidder to fully inform him of all local conditions and factors, which may have any effect on the execution of the works covered under these documents and specifications. TERI shall not entertain any request for clarifications from the Bidder, regarding such local conditions.

1.3 CLARIFICATION

A prospective Bidder requiring any clarification of the tender documents may contact TERI in writing or by mail at the TERI's mailing address indicated in the Invitation for tender.

Enquiries/clarifications may be sought by the Bidder from (Jitendra Tiwari at jitendra.tiwari@teri.res.in and trisha.sharma@teri.res.in

1.4 AMENDMENT OF TENDER DOCUMENTS

At any time prior to the submission of the tender the TERI may for any reason, whether at its own initiative or in response to a clarification requested by the Bidder, modify the tender documents by amendments. Such document shall be made available on websites:

All are requested to remain updated with the website. No separate reply/intimation will be given elsewhere.

SECTION 2: ELIGIBILITY CONDITIONS

Eligibility Conditions for Bidders

1. Minimum Eligibility Conditions

(i) The Bidders should be:

A Registered Manufacturing Company/Firm/Corporation in India of street light (Conforming to relevant National/International standards)

OR

A System Integrator

(At least 1000 street light should have been installed / commissioned

(ii) The bidder should have last three years (i.e., FY 2013–14, 2014–15 and 2015–16) experience in executing contract of street light (Installed and commissioned).

(iii) The Bidder should have valid CST/State VAT/TIN registration certificate. A copy of which should be enclosed.

(iv) Overall Average Annual Turnover of the Company/Firm/ Corporation in the last three financial years (FY-2013-14, 2014-15 and 2015-16) should be at least Rs 1 crore (One crore) (This must be the individual Company's turnover and not that of any group of Companies). A summarized sheet of average turnover certified by registered CA should be compulsorily enclosed along with corresponding balance sheets.

2. Other Eligibility Conditions

The 'Financial bids' of only those bidders shall be opened, who qualify the 'Minimum Eligibility Conditions' as mentioned above and score at least 4-0 points in 'technical evaluation'. The 'Points' for the 'technical evaluation' shall be assigned as under:

SI No.	Criteria	Point
	MNRE accredited off- Grid Channel Partner/ Programme Administrator OR Credit Rating (from MNRE Accredited Rating Agency) of "SP 2C" and above	10
	Cumulative Experience* of the Bidder in executing contracts of Street Light ≥1,000 nos ≥2,000 nos	5 10
	Value of a ' Single Order ' * of solar street light executed by the Bidder :	

	Valued more than Rs 50 lakh	5
	Valued more than Rs 90 lakh	10
	The bidder has ISO 9001 certification	10
	The bidder has ISO 14001 certification	10
	The bidder is capable of providing 24x7 warranty services through its network of service centers	
	(i) Service centers in state of West Bengal other than Purulia & Burdwan District	5
	(ii) Service centre in Purlia & Burdwan District	10
	Experience of working for non-conventional energy/renewable energy/street light) project in association with Government agencies/multilateral /bilateral agency/CSR projects of PSUs, Corporates	10

SECTION 3: PREPARATION OF TENDER

3.1 LANGUAGE OF BID AND MEASURE

3.1.1 The tender prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the Bidder and TERI shall be written in the English provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purpose of interpretation units of measurement shall be MKS system.

3.2 DOCUMENTS COMPRISING THE BID

3.2.1 The tender prepared by the Bidder shall comprise the following components:

(a) Covering letter as provided in the tender document.

(b) General particulars of bidder, as provided in tender document.

(c) Declaration by the Bidder, as provided in tender document

(d) Documentary evidence establishing that the bidder is eligible to Tender and is qualified to perform the contract if their tender is accepted. Checklist of Annexures as provided in tender document

(e) Tender document signed on each page, as a confirmation by the Bidder to accept all technical specifications/commercial conditions along with all necessary enclosures/annexures.

(f) Duly filled technical bid format.

3.3 BID PRICE

3.3.1 The Bidder shall indicate prices on the appropriate financial bid schedule.

3.3.2 DUTIES AND TAXES

The price quoted should include all taxes and duties, Custom Duty, Excise Duty, Service Tax, Sales Tax, C.S.T., local taxes, Trade Tax/VAT, Income Tax, Swatch Bharat Cess, Registration of Excise and Service Tax, Surcharge on income tax, etc., if any. A Bidder shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable as per Government Income Tax and Service Tax norms will be payable by the Bidder. TDS will be deducted from the payment of the Bidder as per the prevalent laws and rules of Government of India and Government of West Bengal in this regard. All compliances (State/Central/Local—VAT/WCT/ESI/PF/Labour law, etc., is to be met by the Vendor) and the same is to be produced by the vendor at the time of payment.

3.4 BID CURRENCIES

3.4.1 Prices shall be quoted in Indian Rupees (INR) only.

3.5 SECURITY DEPOSIT/ PERFORMANCE GUARANTEE

3.5.1 The successful Bidders, who execute the agreement with TERI for the work, shall have to furnish a security amount equivalent to 5% of total value of the order in the form of bank guarantee valid for a period of 24 months from the date of execution of agreement. The bank guarantee may be issued by a nationalized bank. The 'Bank Guarantee' shall be in favour of 'TERI'. The aforesaid bank guarantee shall be furnished prior to the execution of agreement.

3.6 PERIOD OF VALIDITY OF TENDER

3.6.1 Validity of the offer should be three months from the date of opening of the financial bid of the tenders. Tenders without this validity will be rejected.

3.6.2 In exceptional circumstances; the TERI will solicit the Bidder's consent to an extension of the period of validity. The request and the response there of, shall be made in writing. The contract performance security provided under Clause 3.5.1 above shall also be suitably extended.

3.7 BID SECURITY (Earnest Money)

3.7.1 The bidder shall furnish, as part of their bid, a bid security of Rs 50000 (fifty Thousand) in the form of Demand Draft issued by a nationalized bank.

3.7.2 Any bid not secured with the tender fee and earnest money will be considered as non-responsive and rejected by TERI.

3.7.3 No Interest shall be payable on the amount of earnest money and the same will be released, after the tenders have been decided to those Bidders who fail to get the contract.

3.7.4 The tender security (earnest money) may be forfeited if:

a) A Tenderer withdraws its tender during the period of tender validity specified by the Bidder in the tender.

b) If the successful Bidder fails to sign the contract within stipulated period.

3.7.5 EMD of a successful bidder shall only be released after signing of agreement and submission of 5% security bank guarantee.

3.8 FORMAT AND SIGNING OF TENDER

3.8.1 The bid must contain the name, residence, and places of business of the persons making the tender and must be signed and sealed by the Bidder with his usual signature. The name and designations of all persons signing should be typed or printed below the signature.

- 3.8.2 Tender by corporation/company must be signed with the legal name of the corporation/company/firm by the 'President', Managing director or by the 'Secretary' or other designation or a person duly authorized.
- 3.8.3 The original copy of the tender shall be typed or written in indelible ink and shall be signed by the Bidder or a person duly authorized by the Bidder to bid for the contract. The letter of authorization shall be submitted along with power-of-attorney. All the pages of the bid shall be initialed by the person or persons signing the tender.
- 3.8.4 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder in which case such corrections shall be initialed by the person or persons signing the tender.

(Signature of Bidder with seal)

SECTION: 4: SUBMISSION OF TENDER

- 4.1 SUBMISSION OF TENDER: The bid shall be submitted as per the guidelines given in the tender document.
 - 4.1.1 The tender must be completed in all technical and commercial respect and should contain requisite certificate, drawings, informative literature, etc., as required in the specification.
 - 4.1.2 Technical and commercial price bid as per format are to be submitted in two separate and sealed envelopes marked Part-I & Part-II.
 - 4.1.3 First sealed envelope (Part-I) should contain earnest money, technical specification, brochure literature, other documents required, etc. It should be super scribed with tender no. All parts of tender documents except financial bid, duly signed, should be submitted in the first envelope. Requisite earnest money, tender fees in the form of Demand Draft should be attached.
 - 4.1.4 Second sealed envelope (Part-II) should contain financial bid only. It should be super scribed with Tender No. and 'Financial bid'. Anything in regard of financial condition, payment terms, rebate, etc. mentioned in financial bid may make the tender invalid. Therefore, it is in the interest of the tenderer not to write anything extra in Part-II except price.
- 4.2 EXPENSES OF AGREEMENT: A formal agreement for a period of 01 (one) year shall be entered into between TERI and the contractor/bidder for the proper fulfillment of the contract. The expenses of completing and stamping of the agreement shall be paid by the successful bidder.
- 4.3 DEADLINE FOR SUBMISSION OF BIDS: Bids must be submitted by the tenderer on the date, time, and address specified in the tender notice/tender documents.

(Signature of Bidder with seal)

SECTION 5: TENDER OPENING AND EVALUATION

5.1 OPENING OF TENDER

The procedure of opening of the tender shall be as under:

- 5.1.1 First part (part-A) submitted having tender specification and super scribed as 'Technical Bid' shall be opened at the time and date mentioned in the tender notice by TERI's representatives in the presence of Bidders, who choose to be present.
- 5.1.2 Second part (Part-B) containing 'Financial Bid' shall be opened (after obtaining clarifications and establishing technical suitability of the offer) as per schedule. Second part of only those Bidders shall be opened whose first part (Part-A) shall be found commercially clear and technically suitable.

5.2 CLARIFICATION OF TENDER

- 5.2.1 To assist in the examination, evaluation, and comparison of bids TERI may at its discretion ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing.
- 5.3 TERI reserves the right to interpret the Bid submitted by the Bidder in accordance with the provisions of this document and make its own judgment regarding the interpretation of the same. In this regard TERI shall have no liability towards any Bidder and no Bidder shall have any recourse to TERI with respect to the selection process. TERI shall evaluate the Bids using the evaluation process specified in this document or as amended, at its sole discretion. TERI's decision in this regard shall be final and binding on the Bidders.

Signature of Bidder with seal

SECTION 6: PROCEDURE FOR FINALIZATION OF BID

- 6.1 PROCEDURE FOR FINALIZATION OF BID: The procedure for finalization of Bid would be as follows:
- 6.1.1 Finalization of BID:
First the Technical bids shall be opened, evaluated and list will be prepared
Then the price bid of technically qualified bidders shall be opened.
The lowest rate (i.e., L-1) shall be the party to be awarded the contract.
- 6.2 FINALIZATION OF EMPANELMENT
First the Technical Bids shall be opened, evaluated and list will be prepared
Then the price bid of technically qualified parties shall be opened.
- The lowest rate (i.e., L-1) received (and in turn approved by the competent authority would be the 'Approved Rate'.
 - L-1 i.e., lowest rate bidder will be awarded up to 60% of the total bid quantity or as per their capacity given in the bid, whichever is lower.
 - Approved lowest rate would be offered to those lowest bidders (i.e. L-2, L-3, and so on) having quoted a price not more than 25% of lowest approved rates (L-1) and they will be empanelled and awarded equally remaining 40% of total bid quantity or as per his capacity given in the bid, whichever is lower.
 - In case no vendor matches L1 rate then the entire contract will be given to lowest bidder.
 - TERI will assign districts to the shortlisted contractor/bidders/suppliers as and when districts are ready to take supplies. One district will have only one contractor/bidder, so that he can open a service station. TERI will place orders with the contractor/bidder.
 - TERI may stagger supplies in a district depending on readiness of each village.
 - Training of the users and entrepreneurs/operators will be arranged by the contractor/bidder.
 - After work order is placed for work, should be executed within the time schedule stipulated in work order. In case of delay (for any reason other than due to Force Majeure conditions or any extension thereof granted to him by TERI) a penalty equal to 1.0% of the price of the unperformed services for each week (For the purposes of calculation of delay, part of week shall be treated as week) of delay until actual performance up to a maximum deduction of 10% of the delayed services.
- 6.3 If required TERI reserves the right to negotiate with (lowest) L-1 bidder before finalization of the tender.
- 6.4 TERI reserves the right at the time of awarding the contract to increase or decrease the quantity of goods and locations of supply without any change in price or other terms and conditions.
- 6.5 TERI reserves the right to accept any bid and to reject any or all bids.

6.6 NOTIFICATION OF AWARDING THE CONTRACT

Successful Bidder(s) for contract shall be intimated in writing.

6.7 CONTRACT

Before execution of the work, a contract agreement for execution of the work shall be signed by the Bidder with TERI within 15 days of communication from TERI. In case agreement is not executed within the stipulated time, the earnest money will be forfeited.

(Signature of Bidder with Seal)

PART 3: GENERAL CONDITIONS OF CONTRACT

1.0 In the deed of contract unless the context otherwise requires:

- 1.1 TERI shall short list the successful bidder (s) on 'Rate Contract' basis after verifying their capacity (or may choose one party i.e. L1, to execute the order). The Project shall be executed by TERI. The successful bidder (s) shall have to sign the Contract with TERI.

DEFINITIONS:

- 1.2 'TERI' shall mean The Director General of TERI or his representative and shall also include its successors in interest and assignees. The 'Contractor' shall mean (successful bidder) i.e. the person whose tender has been accepted by TERI and shall include his legal representative's and successors in interest.
- 1.3 The agreement shall be on turn-key basis. The work shall be completed within stipulated time from the date of placement of work order. However 'TERI' may in case of urgency ask the bidder to complete the work earlier, with the mutual consent of the contractor/bidder. In case the contractor/bidder fails to execute the said work within stipulated time, 'TERI' will be at liberty to get the work executed from the open market without calling any tender/e-tender and without any notice to the contractor/bidder, at the risk and cost of the contractor/bidder. Any additional cost incurred by 'TERI' shall be recovered from the contractor/bidder. If the cost of executing the work as aforesaid shall exceed the balance due to the contractor/bidder, and the contractor/bidder fails to make good the additional cost, 'TERI' may recover it from the contractor/bidders' pending claims against any work in 'TERI' or in any lawful manner.
- 1.4 That on the request of the contractor/bidder and also in the interest of the organization the 'TERI' is authorized to extend the validity of the agreement, subject to that the request of the contractor/bidder is received before the expiry of the agreement period, or any extended period granted to the contractor/bidder. Maximum period of extension shall be two months on the same terms and conditions as contained in this agreement.
- 1.5 The agreement shall be deemed to be extended till the date of completion of last work order subject to the completion period as provided in the Clause 1.3.
- 1.6 The contractor, (i.e., the successful bidder), may be allowed to operate in the State of West Bengal through a single authorized dealer for execution of the orders placed on authorized dealer. It will be the sole responsibility of the contractor, to execute orders placed as per time schedule, and to ensure quality parameters, specifications and other requirements provided in the tender document and as per agreement.
- 1.7 In the interest of the work and the programme, agreement executed between the contractor/bidder and the 'TERI' may be extended to a mutually agreed period, if the need so arises. It shall be the sole responsibility of the contractor/bidder to get verified the quality and quantity of the supplied material at the site of delivery.

2 LIQUIDATED DAMAGES

2.1 If the contractor/bidder fails to perform the services within the time periods specified in the contract, the 'TERI' shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damage, a sum equivalent to 1.0% of the price of the unperformed services for each week (For the purposes of calculation of delay, part of week shall be treated as a week) of delay until actual performance up to a maximum deduction of 10% of the delayed services. Once the maximum is reached, the 'TERI' may consider termination of the contract. In the case of violation of contract, TERI may confiscate pending payments/dues of the contractor/bidder assigning specific reasons and shall also have the power to debar/blacklist the contractor/bidder in similar circumstances. TERI may also invoke performance/security bank guarantee of 10%.

3 The contractor/ bidder shall have to comply with all the rules, regulations, laws and bye-laws for the time being in force and the instructions if any, of the organization, in whose premises the work has to be done. 'TERI' shall have no liability in this regard.

4 **FORCE MAJEURE**

4.1 Notwithstanding the provisions of clauses contained in this deed; the contractor/bidder shall not be liable for the forfeiture of their performance security, liquidated damages, termination for default, if he is unable to fulfill his obligation under this deed due to event of force majeure circumstances.

4.2 For purpose of this clause, 'Force majeure' means an event beyond the control of the contractor/bidder and not involving the contractor/bidder's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of Government either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes

4.3 However, if a force majeure situation arises, the contractor/bidder shall immediately notify 'TERI' in writing. The decision of the competent authority of TERI in above conditions shall be final.

5 The High court of Judicature at New Delhi and Courts subordinate thereto, shall alone have jurisdictions to the exclusion of all other courts.

6 The contractor/bidder shall not, without the consent in writing of 'TERI', transfer, assign or sublet the work under the contract or any substantial part thereof to any other party.

7 'TERI' shall have at all reasonable time access to the works being carried out by the contractor/bidder under the contract. All the work shall be carried out by the contractor/ bidder to the satisfaction of 'TERI'.

8 If any question, dispute or difference what so ever shall arises between 'TERI' and the contractor/bidder, in the connection with the agreement except as to matters, the decisions for which have been specifically provided, either party may forthwith give to the other notice in writing of existence of such question, dispute or difference and the same shall be referred to the sole arbitration of the Director-General, TERI, or a person nominated by him. This reference shall be governed by the Indian Arbitration and Conciliation Act 1996, and the rules made there under. The award in such arbitration shall be final and binding on both the parties. Work under the agreement shall be continuing during the arbitration proceedings unless the 'TERI' or the arbitrator directs otherwise.

9 'TERI' may at any time by notice in writing to the contractor/bidder either stops the work all together or reduces or cut it down. If the work is stopped all together, the contractor/bidder will only be paid for work done and expenses distinctly incurred by him as on preparation or the execution of the work up to the date on which such notice is received by him. Such expenses shall be assessed by 'TERI', whose decision shall be final and binding on the contractor/bidder. If the work is cutdown, the contractor/bidder will not be paid any compensation what so ever for the loss or profit which he might have made if he had been allowed to complete all the work included in the contract.

10 INSPECTION AND TESTS

10.1 The following inspection procedures and tests are required by 'TERI' in the presence of 'TERI's representative if so desired by 'TERI'.

10.2 The 'TERI' or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the contract. The special conditions of contract and/or the Technical specifications shall specify what inspections and test 'TERI' requires.

10.3 INSPECTION AT WORKS

10.3.1 The 'TERI', his duly authorized representative shall have at all reasonable times access to the contractor/bidders premises or works and shall have the power at all reasonable time to inspect and examine the materials and workmanship of the works during its manufacture.

10.3.2 The contractor/bidder shall give the 'TERI', 15 day's written notice of any material being ready for testing. It shall be mandatory that such notice should reach 'TERI' within 30 days of placement of work order. Such tests shall be on the contractor/bidder's accounts/expenses except for the expenses of the inspector. 'TERI' reserves the full rights, to waive off inspection of material.

10.3.3. TERI Inspection team may conduct pre dispatch inspection for complete materials at the vendor factory before dispatch of materials as per technical inspection and PDI will be conducted based on " **Sampling & AQL standard ISO 2859-1**"

- 10.3.4 The contractor/bidder is required to get the entire lot of the ordered material inspected at one time, before the supply of the materials.
- 10.3.5 All arrangements for the inspection of materials will be done by bidder.
- 10.3.6 The inspection by 'TERI' and issue of dispatch instruction there of shall in no way limit the liabilities and responsibilities of the contractor/bidder in respect of the agreed quality assurance programme forming a part of the contract.

11. **WARRANTY**

- 11.1 The contractor/bidder shall warrant as per standards for quality that anything to be furnished shall be new, free from all defects and faults in material, workmanship and manufacture, shall be of the highest grade and consistent with established and generally accepted standards for material of the type ordered, shall be in full conformity with the specifications, drawing or samples, if any and shall if operable, operate properly.

Nothing in Clause 10 above shall in any way release the contractor/bidder from any guarantee or other obligations under this contract.

- 11.2 **Performance of Equipment:** In addition to the warranty as already provided, the contractor/bidder shall guarantee satisfactory performance of the equipment and shall be responsible for the period or up to the date specified in Clause 11.3 hereof after the equipment has been accepted by 'TERI' to the extent for any defects that may develop such defects shall be removed at their own cost when called upon to do so by 'TERI'.
- 11.3 The Warranty period shall be three years for complete system including Module, charge controller, battery, LED from the date of commissioning and handing over of the system. The contractor/bidder shall rectify defects developed in the system within Warranty period promptly. In case the defects are not rectified within a week of the receipt of the complaint by the contractor/bidder, 'TERI' shall have full liberty to restore the system in working condition. The expenditure so incurred by 'TERI' shall be deducted from the contractor/bidder pending claims, security/performance guarantee deposit or in other law full manner.
- 11.4 Since the maintenance of the system may also be taken up by the contractor/bidder after expiry of three years of warranty period if the end user/'TERI' so desires, the contractor/bidder shall take up annual maintenance of the installed system.
- 11.5 The contractor/bidder shall maintain the system under annual maintenance contract with the enduser.
12. Notice statement and other communication sent by 'TERI' through registered post or telegram or fax or Email to the contractor/bidder at his specified addresses shall be deemed to have been delivered to the contractor/bidder.

13. Any work which is not covered under this contract but is essential required for the completion of job (To the satisfaction of TERI) shall be carried out by the contractor as extra item or which payment shall be made separately at the rates decided by TERI.
14. The work shall be carried out by the contractor/bidder as per design and drawings approved by 'TERI', wherever, necessary, the contractor/bidder shall submit relevant designs and drawings for approval of 'TERI', well in advance. Work carried out without 'TERI's approval shall not be accepted and 'TERI' shall have the right to get it removed and to recover the costs incurred from the contractor/bidder.
15. The contractor/bidder shall provide one copy system pass book containing instruction manual/routine maintenance manual and maintenance record of the systems with each unit supplied or installed, this shall be both in English and Hindi language. (The draft of pass book shall be approved by TERI).

The following minimum details must be provided with manual:

- (a) About the complete system including combustion chamber, fan, regulator and electronics
 - (b) Dos and Don'ts
 - (c) Clear instructions on regular maintenance and trouble shooting of the system
 - (d) Name and address of the contact person in case of non-functioning of the system.
16. The contractor/bidder shall not display the photographs of the work and not take advantage through publicity of the work without written permission of 'TERI'. The contractor shall distribute and fix a calendar at site, showing instructions, Dos, Don'ts with each unit. (The format of calendar should be approved by TERI).

17. **PATENT RIGHT AND ROYALTIES**

The contractor/bidder shall indemnify 'TERI' against all third party claims of Infringement of patent, royalty's trademark or industrial design rights arising from use to the goods or any part thereof.

18. **PACKING FORWARDING**

- 18.1 Contractor/bidders, wherever applicable, shall after proper painting, pack, and crate all the equipment in such manner as to protect them from deterioration and damage during rail and road transportation to the site and storage at the site till time of installation. Contractor/bidder shall be held responsible for all damage due to improper packing.
- 18.2 The contractor/ bidder shall inform the 'TERI' of the date of each shipment from his works, and the expected date of arrival at the site for the information of the 'TERI' project offices at least seven days in advance.

19. **DEMURRAGE WHARFAGE, ETC**

All demurrage, wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the contractor/bidder.

20. **INSURANCE**

The goods supplied under the contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage during transportation shall be included in the bid price.

21. **Compliance**

All compliances (State /Central/Local—VAT/WCT/ESI/PF/Labour law, etc., is to be met by the Vendor) and the same is to be produced by the vendor at the time of payment.

22. **TRANSPORTATION**

The contractor/bidder is required under the contract to deliver the goods to the site. Road permit and entry taxes to be facilitated and arranged by the Bidder.

23. **TERMINATION FOR INSOLVENCY**

'TERI' may at any time terminate the contract by giving written notice to the contractor/bidder without compensation to the contractor/ bidder, if it becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the 'TERI'.

24. **TERMINATION FOR CONVENIENCE**

The 'TERI', may by written notice sent to the contractor/bidder, terminate the contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the purchaser's convenience in the interest of 'TERI'.

25. **APPLICABLE LAW**

The contractor/ bidder shall be interpreted in accordance with the laws of the purchaser's country i.e., India.

26. **NOTICE**

26.1 Any notice given by one party to the other pursuant to the contract shall be sent in writing or by email and confirmed in writing to the address specified for that purpose in the special condition of contract.

26.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

27 **TAXES DUTIES AND INSURANCE**

The price quoted should include all taxes, duties and Insurance expenditure, Custom Duty, Excise Duty, Service Tax, Sales Tax, C.S.T., local taxes, Trade Tax/VAT, Income Tax, Surcharge on Income Tax, etc. if any. A supplier/ contractor/ bidder shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable as per Government income tax and service tax norms will be payable by the contractor/bidder. If any new tax/duty is levied during the contract period the same will be borne by the contractor exclusively. TDS will be deducted from the payment of the contractor/bidder as per the prevalent laws and rules of Government of India and Government of West Bengal in this regard.

28. OTHERS

- 28.1 The Contractor/ bidder in consultation with concerned Project Officer of 'TERI' will conduct training programme for users, focusing on main features, operation and maintenance of the systems.
- 28.2 The contractor/bidder shall continue to provide spare parts after the expiry of warranty period at the users cost till the product life. If the contractor/bidder fails to continue to supply spare parts and services to users, 'TERI' shall take appropriate action against the contractor/bidder.
- 28.3 After successful supply/commissioning of the system and training, the system will be handed over to the person designated by the TERI.
- 28.4 It shall be the sole responsibility of the contractor/bidder to get verified the quality and quantity of the supplied material at the site of delivery.

29. PAYMENTS

The payments shall be made as per the following terms and conditions (Details in Scope of Work):

- i) 70% of the ordered value after the supply of the complete system as specified in the contract.
 - ii) 20% of the ordered value after establishing of service center, installation and commissioning of the system along with the handing over certificate, indicating bill of material and successful commissioning duly counter signed by the designated officer and end user.
 - iii) 10% payment after one year from the date of installation, given timely and satisfactory warranty coverage during the elapsed period and on submission of document listed.
 - iv) Purchase order for on-site warranty for three years will be released separately. The payment for this activity will be released as reimbursement and half-yearly basis, on submission of documents as proof of execution.
 - v) All the payment shall be released from TERI Head Office, New Delhi on submission of requisite documents.
30. In case of any ambiguity in interpretation of any of the provisions of the tender, the decision of 'TERI' shall be final.
31. All statutory compliances as applicable in India during the execution period of the contract shall be complied with by the Vendor and TERI shall not be directly or indirectly liable for such compliances. The Vendor/contractor shall also be responsible for any demand that would be raised on TERI by any statutory authorities relating to this contract in future.

(Signature of Bidder with Seal)

PRICE FALL CLAUSE

To,

(Address:)

Subject: Price fall clause against Tender No.- TERI/ST/LaBL/2016-17/001 dated 05.08.2016

Dear Sir / Madam,

With reference to the tender no. TERI/ST/LaBL/2016-17/001 dated 05-08-2016, it is hereby confirmed that the price quoted by _____(Name of the Supplier) for the Solar Street Light, against this tender is the best possible price we could offer and no further reduction in the price is possible.

It is further confirmed that till the date of submission of this bid, _____(Name of the supplier) has not supplied any Solar Street Light, having the same specification, as mentioned in the above tender, to any government agency / departments, below the price quoted by it in the tender.

Thanking you,

(Supplier Name with Stamp)

Authorized Signatory

Part 4: SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

Objective: To provide Solar Street Light to approximately 100 sites at the project site at various districts, in the state of West Bengal.

Description: The tender is for undertaking the above project of Solar Street Light which includes, supply, installation, commissioning and maintenance of the complete system at every selected site and providing comprehensive on-site warranty of the installed system during the warranty period.

Scope of the work: Scope of work under the project is as defined below:

- I. **Procurement, Supply and Delivery of all components (hardware materials) of Solar street Light at project sites in West Bengal, India.**
- II. **Fabrication, installation and commissioning of Solar Street Light at every designated site.**
- III. **On-site warranty of the complete system (Solar Street light) for three years.**

Delivery

Delivery of materials: As mutually agreed, but not exceeding 21 days from the date of purchase order. All the materials as specified in the purchase order should be delivered at the sites of installation. Transit insurance and storage insurance till the handing over of all materials will be within the scope of work. The vendor should provide the manufacturer's warranty on all components supplied.

Delivery time for installation and commissioning: Installation should be completed within 30 days from the date of delivery of material. The systems will be deemed commissioned only after successful trial run of the system for 3 days from the date of installations. Warehousing and storage of all components will be in the scope of work till the commissioning of all systems as per the purchase order.

On-site Warranty

The vendor will be responsible for complete on-site warranty of the installed systems for three years from the date of commissioning including preventive and corrective maintenance services. It is mandatory for the vendor to open an authorized service center in the concerned district before the vendor qualifies for such work. The scope of work for on-site warranty services will further include the following:

- (a) All preventive maintenance and repair activities associated with Solar Street Light.
- (b) Vendor will establish a service station(s) near the site to cater for receiving and recording all complaints, attending the complaints, stocking essential spares, provisioning trained service personnel, recording monthly logs of all activities, etc.

- (c) Vendor shall provide the maintenance service through its service station(s) to keep the Solar Street light in good working conditions which shall also include the periodical corrective and remedial maintenance service.
- (d) The complaints should be attended to within a maximum timeframe of seven calendar days. Monthly log of the complaints received and rectified must be maintained and submitted to TERI.
- (e) Vendor shall provide all normal tools and testing equipment needed for maintenance of the station at its own cost.
- (f) During the three-year period, the repair works will have to be carried out at the location of the Solar Street light except in exceptional circumstances where the equipment or any component may be required to be taken out for repair, for which specific written permission should be obtained from TERI/TERI representatives. In such cases, standby arrangements are required to be made by vendor so that the Solar Street light remains in functional state. All products have valid product warranty and hence on-site repair and maintenance service needs to be provided after getting replenishment of spares from respective product manufacturer.
- (g) If the vendor fails to attend the complaint within seven calendar days, a reasonable penalty of 5% may be deducted from the gross amount of half yearly bill. An additional 10% penalty may be deducted for every week the complaint remains unattended/un-rectified beyond the first week.
- (h) If the work of the vendor is found unsatisfactory or if the vendor dishonors the contract, TERI shall be entitled to terminate the contract and TERI's decision will be final and binding on the vendor. In that case, the payment of last invoice amount will not be done in addition to the above penalty charges and other remedial measures as deemed fit by TERI.
- (i) Vendor shall submit the bill along with the verification report counter-signed by TERI representative.

Payment Terms

The payment terms will be as follows:

- (a) 70% payment against delivery of material as per purchase order, on-site and subject to submission of documents listed as points 'a' to 'i' under 'Documents' as proof of delivery.
- (b) 20% payment against installation and commissioning of solar street light at each designated site, as per purchase order, on-site, along with proof of establishing of service center, and subject to submission of documents listed as points 'j' to 'n' under 'documents' as proof of completion.
- (c) 10% payment after one year from the date of installation, given timely and satisfactory warranty coverage during the elapsed period and on submission of document listed.

- (d) Purchase order for on-site warranty for three years will be released separately. The payment for this activity will be released as reimbursement and half-yearly basis, on submission of documents as proof of execution.

Documents

Following documents need to be submitted to TERI for processing of payments:

- (a) Invoice of complete material supplied along with proof of delivery at site (sign and stamp of person who has received and verified the materials)
- (b) Delivery challan(s)/ waybill
- (c) Local entry tax bill (if applicable)
- (d) Complete list of beneficiaries verified by TERI state representatives
- (e) The warranty certificates for complete system (as per Purchase Order)
 - i. Complete system warranty certificate from the supplier.
 - ii. OEM –back to back warranty letter for all components.
 - iii. Warranty letter from battery manufacture of the lifecycle should be required separately for minimum 2000 cycles.
- (f) All reports should be duly stamped and signed by the authorized representative of the vendor.
- (g) Invoice of installation and commissioning as per purchase order.
- (h) Commissioning and handover certificate (as prescribed), counter-signed by User/TERI Representative/NGO, to be provided within 3 months of installation of street light.
- (i) Minimum two (2) photographs (preferably dated) for each street light in soft copy (Compact Disc/ Pen Drive/ DVD) clearly showing the Solar Street light. Photographs should be clear and of minimum postcard size with date of installation and location.
- (j) Proof of establishment of service centers /shop along with complete details of the service centers/shop verified by the TERI representative (Photo and registration documents).
- (k) Detailed complaint log of all the complaints received during the period (every fifteen days).
- (l) Rectification log of all complaints attended and remedial measures taken (every fifteen days).
- (m) Verification report signed by user and TERI representative.
- (n) Shall submit the supporting document as proof {photograph with any one of ID proof (Voter ID/ Aadhar card), and address proof has to be taken while installation of the system}.

NOTE:

- (a) For the prompt execution of the project, TERI may choose more than one vendor for carrying out the project.
- (b) The selected vendor is mandatorily required to open office to carry out on-site warranty services at site within a month from the date of purchase order.
- (c) Logo (TERI and CIL) embossing has to be done on Solar street light.

Technical Specifications for Solar Street light

The BoS items/components of the Solar Street light deployed must confirm to the latest edition of IEC/equivalent BIS standards.

Solar Street Light

PERFORMANCE SPECIFICATIONS	
PV Module	80 Wp under STC
Battery	Minimum 400 Wh Lithium battery (with minimum 2000 life cycle)
Light Source	White Light Emitting Diode (W-LED) 20 Watt (Max.), W-LED luminaire, dispersed beam, soothing to eyes with the use of proper optics and diffuser
Light Out put	Multiple Light levels: The lamp should have two levels of light to take care of different lighting needs during the night. Minimum 42 Lux when measured at the periphery of 4 meter diameter from a height of 5 meter (at “High” illumination level). The illumination should be uniform without dark bands or abrupt variations. Minimum 21 lux at lower illumination level (Higher light output will be preferred)
Mounting of light	6 meters pole mounted above ground level , (Design for ground work and for street light is attached in Annexure A – Images represent is indicative & not be treated for actuals works)
Electronics	Overall total Efficiency of the Electronics should be Minimum 90%
Duty Cycle	Dusk to Dawn 6 Hours full light ,rest of the time at lower light level (50% light output)

TECHNICAL DETAILS

PV MODULE

- (i) The power output of the module under STC should be a minimum of 80 Wp.
- (ii) The PV module should be made up of crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II / BIS 14286 from an NABL or IECQ accredited Laboratory.
- (iv) The Load voltage* of 16.40 V for 12 V battery or appropriate voltage for charging of battery used, under the standard test conditions (STC) of measurement.
- (v) The module efficiency should not be less than 13 %.**
- (vi) The terminal box on the module should have a provision for opening, for replacing the cable, if required.
- (vii) There should be a Name Plate fixed inside the module which will give:
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number
 - d. Year of manufacture
 - e. RFID tag shall be present on the module as per JNNSM guidelines.
- (viii) A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.**

*The Load voltage conditions of the PV modules are not applicable for the system having MPPT

BATTERY

Minimum 400 Wh Lithium battery with minimum 2000 life cycle .
Battery should conform to the latest BIS/ International standards.

LIGHT SOURCE

- (i) The light source will be of white LED type.
- (ii) The colour temperature of W-LEDs used in the system should be in the range of 5500 deg K–6500 deg K.
- (iii) LEDs should not emit ultraviolet light.
- (iv) The light output from the W-LED light source should be constant throughout the duty cycle
- (v) The lamps should be housed in an assembly suitable for outdoor use (IP 65).

ELECTRONICS

- I. The total electronic efficiency should be at least 90 %.
- II. The idle current should be less than 10 mA
- III. The voltage drop from module terminals to the battery terminals should not exceed 0.8 volts including the drop across the diode and the cable when measured at maximum charging current.
- IV. The PCB containing the electronics should be capable of solder free installation and replacement.

ELECTRONIC PROTECTIONS

- I. The system should have protection against battery overcharge, deep discharge condition.
- II. Adequate protection should be provided against battery reverse polarity.
- III. Fuses should be provided to protect against short circuit conditions. Fuse is not mandatory, in case, over current protection is provided in the driver circuit.
- IV. Protection for reverse flow of current through the PV module(s) should be provided.
- V. Temperature compensation should be available.

MECHANICAL COMPONENTS

- (i) A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.
- (ii) The frame structure should have provision so that the module can be oriented at the suitable tilt angle.
- (iii) The pole should be made of Galvanised Iron (GI) pipe.
- (iv) The height of the pole should be 6 metres above the ground level, after grouting and final installation.
- (v) The pole should have the provision to hold the luminaire.
- (vi) The Luminaire housing should be water proof (IP 65) and should be painted with a corrosion resistant paint and should be housing the battery.

INDICATORS

The system should have two indicators, green and red.

The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.

Red indicator should indicate the battery "Load Cut Off" condition

QUALITY AND WARRANTY

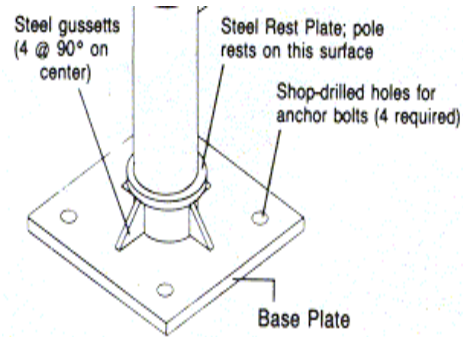
(i) The complete Solar Street Lighting System (including battery) will be warranted for a period of Five years from the date of supply.

(ii) The PV module(s) will be warranted for a minimum period of 25 years from the date of supply. PV modules used in Solar Home Lighting System must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.

(iii) The Warranty Card to be supplied with the system must contain the details of the system. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.

ANNEXURE A

Foundation Dimensions:



Above Ground level mounting dimensions: Concrete foundation: 300 X 300 X 300mm



Ground level mounting dimensions: Concrete M20 grade : 450 X 450 X 600 mm



Base plate: Base plate will be welded with pole as indicative in pictures: Size of plate will be 300 X 300 X 10 mm



- Anchor fastener: 25mm dia
- Length 750 mm
- Qty : 4 nos in each pole

Indicative photos only

PART -5

WARRANTY AND MAINTENANCE

- The mechanical structures, module, LED and overall workmanship of the street light must be warranted for a minimum of three years from the date of commissioning and handing over of the system.
- The Comprehensive Maintenance (within warranty period) shall be executed by the firm themselves or through the authorized dealer/service center of the firm in the concerned district. It is mandatory for the contractor/bidder to open an authorized service centre in the concerned district before the supply/installation of the system.
- Necessary maintenance spares (**at least 5% of installed quantity**) for three years trouble free operation shall also be supplied with the system.
- The contractor/bidder shall be responsible to replace free of cost (including transportation and insurance expenses) to the purchaser whole or any part of supply which under normal and proper use become dysfunctional within one month of issue of any such complaint by the purchaser.
- The service personnel of the Successful Bidder will make routine quarterly maintenance visits.
- The maintenance shall include thorough testing and replacement of any damaged parts Apart from this any complaint registered/service calls received/faults notified in the report should be attended to and the system should be repaired/ restored/ replaced within seven days.
- A separate Service and Maintenance manual shall be maintained with each system as per the format provided by TERI. The deputed personnel shall be in a position to check and test all the components regularly, so that preventive actions, if any, could be taken well in advance to save any equipment from damage. Any abnormal behaviour of any component shall be brought to the notice of TERI for appropriate action.
- Normal and preventive maintenance of the street light. During operation and maintenance period of the street light, if there is any loss or damage of any component due to miss management/miss handling or due to any other reasons pertaining to the deputed personnel, what-so-ever, the supplier shall be responsible for immediate replacement/rectification. The damaged component may be repaired or replaced by new component.
- Contractor/bidder shall submit verified half-yearly maintenance report regularly to TERI within 15 days of period ending six months. Failing which payment for such period will not be released or recommended.

PART-6

TECHNICAL BID

TENDER NO. TERI/ST/LaBL/2016-17/001

SI No.	Description		To be Furnished by the Tenderer
	Solar Street Light		
1	Technical details of:		
	Solar Panel	Make	
		Type of Solar cell	
		Capacity of Solar module in Watt at STC	
		Solar Module efficiency (in %)	
		certificate of testing conforming to IEC 61215 Edition II/ BIS 14286	
	Pole	Pole material	
		Height and diameter of pole	
		Height of pole above ground	
		Pole grouting details	
	LED Luminary	Make of LED	
		Wattage of Luminary	
		Light output at the periphery of 4 meter diameter from a height of 5 meter (in Lux) Higher mode Lower mode	
		Efficiency of Electronics (In %) Driver circuit Charge controller	

	Overall	
	Type of charge controller (PWM / MPPT)	
	Test certificate available (IEC standards/NABL accredited labs/BIS standards)	
Battery	Type of Battery	
	Battery Voltage in volt	
	Capacity of battery In Ah In Wh	
	Minimum life cycle of battery	
	Test certificate available (IEC standards/NABL accredited labs/BIS standards)	

(Signature of bidder with seal)

PART-B

FINANCIAL BID

TENDER NO. TERI/ST/LaBL/2016-17/001

Name of the Firm: -----

Implementation (Supply, installation and maintenance) of approximately 100 nos of Solar Street Light in the rural areas of West Bengal.

Sl No.	Item	Unit Rate (in Rs)
1	Supply of Solar Street Light at FOR site	
2	Installation and Commissioning	
3	Comprehensive maintenance charges for three years	
Total Amount (in figures and words):		

NOTES:

1. Certified that rates quoted above are as per the requirement, specification. Terms and condition mentioned in the tender document.
2. The rates are inclusive of all taxes and duties, storage, transportation up to site, insurance, etc., and any other job required to properly execute the work.

(Signature of Bidder with seal)

To be submitted in Part-II (B) in financial bid.

Other documents/conditions, terms if enclosed may lead to rejection of bid.